

## CENTRAL INTELLIGENCE AGENCY

## INFORMATION REPORT

This Document contains information affecting the National Defense of the United States, within the meaning of Title 18, Sections 793 and 794, of the U.S. Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law. The reproduction of this form is prohibited.

SECRET/CONTROL - U.S. OFFICIALS ONLY

SECURITY INFORMATION

25X1A

COUNTRY	Romania	REPORT NO.	[REDACTED]
SUBJECT	Danube-Black Sea Canal	DATE DISTR.	19 February 1953
	25X1A	NO. OF PAGES	10
DATE OF INFO.	[REDACTED]	REQUIREMENT NO.	RD
PLACE ACQUIRED	[REDACTED] 25X1C	REFERENCES	

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.  
THE APPRAISAL OF CONTENT IS TENTATIVE.  
(FOR KEY SEE REVERSE)

25X1X

1. The general management of the Canal is located on Strada Epureanu, Bucharest. The plans for the construction of the Canal were drawn up in general outline by Soviet engineers in 1949, who then examined the site and made the necessary adjustments. Any changes in the original plan must be approved in Leningrad, before they can be incorporated in the blueprint. Two Soviet engineers, one a woman, are members of the general management of the Canal works and supervise the execution of the original plans.
2. Work was begun on the Canal in May 1949, at which time provisional contracts were concluded with state building and supply organizations.
  - a. The Ministry of the Interior undertook to supply political and criminal prisoners as labor and to provide for their maintenance from the payment made for this labor by the Canal management.
  - b. Comlemn contracted to build the necessary hutments, supplied about 40,000 sq. meters of prepared boards, and furnished specialists to supervise the erection of the huts.
  - c. Plumbing was undertaken by Construction Enterprise Number 21 and other state organizations.
3. By 1951 the Canal works organization had been able to carry out 90 percent of the work. The Ministry of the Interior was still supplying prison labor and the Army was still sending some labor battalions, but most of the workers at that time were civilians.
4. The Canal is to be 64 kilometers long. It starts about 600 to 700 meters downstream from the Cernavoda Bridge across the Danube at Cernavoda, crosses the Cernavoda railroad track, runs past Saligry, follows the Carasului Valley to one kilometer beyond Dorobantul, crosses the Cernavoda-Constanta line at this point, and runs north of the track to Poarta Alba, Basarab Ovidiu (Canara), Valea Neagra, Valul Lui Traian, Satul Mamaia, Navodari, and Capul-Midia (Tasaul).

SECRET/CONTROL - U.S. OFFICIALS ONLY

STATE	X	ARMY	Ev	X	NAVY	X	AIR	X	FBI		AEC		ORR/	Ev	X				
-------	---	------	----	---	------	---	-----	---	-----	--	-----	--	------	----	---	--	--	--	--

(Note: Washington Distribution Indicated By "X", Field Distribution By "#")

75

25X1A

SECRET/CONTROL - U.S. OFFICIALS ONLY

- 2 -

5. In the Carasului Valley the Canal crosses a marshy area where excavation is impossible in the summer. Installations have been built at Saligny to drain the area in sections by cutting small canals through which water is pumped into the Danube.
6. The water in the Canal is to be 4.5 meters deep. In some places a depth of 30 meters have been excavated because of high ground through which the Canal passes. The bottom of the Canal, 37 meters wide, is inclined laterally toward a line along the center. The banks rise in several terraces to prevent collapse of soil. A narrow canal has been dug at one side of the bottom of the future main Canal to drain off rainwater and ground water which has accumulated during the work.
7. An experimental section, similar to the Canal itself, has been dug between the Danube and Cernavoda to test suitable profiles for the embankment.
8. The Canal begins at Cernavoda, where a regional headquarters of the Canal works has jurisdiction as far as Mircea-Voda. Ships will enter the Canal about 600 meters below the railway bridge across the Danube.
9. Approximately 60 meters of the Canal have been excavated from the junction with the Danube. Experimental and drainage canals have been cut, and a pumping station has been built. Work in the town and port will be done last, so as not to interfere with the supply of materials by rail.
10. The real work on the Canal was begun approximately 2.5 kilometers southeast of the Danube, just outside the town of Saligny. When the port is ready, the missing 2.5 kilometers of the Canal will be excavated, and the old town will be demolished and rebuilt on a neighboring hill. Fifty new houses had already been built there by March 1951.
11. The port installations at Cernavoda extend about 400 meters downstream and 100 meters upstream from the railway bridge. The port itself has almost no equipment; small barges and boats carrying building material, gravel, and sand from Turtucaia, Calarasi, and Caracal are unloaded by means of pontoon jetties.
12. Large depots, in which approximately 3,000 cubic meters of round wood and 1,000 cubic meters of boards and beams are stored, are maintained in Cernavoda. Iron, glass, tarred paper, and sanitary ware are stored in the former barracks.
13. The port and the Canal junction with the river were the first sections to be completed. To secure the opposite bank of the river, soil was excavated and a series of stakes driven into the ground and secured with a network of twigs and brush weighted with gravel. On the right shore the bank was excavated for a distance of 250 meters. Wooden piles were rammed in to a depth of five meters, and the spaces were filled in with carefully fitted blocks of cemented stone. This provides a framework for the port and the junction of the river and the Canal. Most of this work was done by prisoners.
14. Two large garages, 60 x 70 x 6 meters, with arched tin roofs have been erected for repair work on the 200 trucks used by the Canal works.
15. A large cement factory obtains its materials from the Bogdaprosti quarries. It has sidings both to the Cernavoda station and to the new station for the port. These sidings have 1.45 meter and 76 centimeter tracks laid on the same ties. The narrow gauge track runs to the quarry. Both tracks are also used by the Canal Works to transport labor and materials. A ten-car train runs on the narrow gauge track every ten minutes.
16. Two large Soviet bucket dredgers are used on the excavation of the Danube shores, and two German .5 cubic meter excavators work in the cement factory's quarry.

SECRET/CONTROL - U.S. OFFICIALS ONLY

25X1A

SECRET/CONTROL - U.S. OFFICIALS ONLY

- 3 -

17. Three or four kilometers downstream from the Cernavoda railway bridge are two islands. The main Securitate prison labor camp is located on the right bank of the river, exactly opposite the southern point of the larger island. In March 1951 there were approximately 4,000 prisoners at Cernavoda; this number includes criminals, political detainees, and persons held under administrative orders only.
18. About 1.5 kilometers upstream from the bridge is the island of Chinion. The granite quarry on this island supplies the blocks of stone and gravel needed for the port and Canal opening.
19. Barracks, surrounded by anti-aircraft guns, are located on a hill one kilometer northeast of Cernavoda.
20. The most important points in this area are the railway bridge, the railway viaduct, and the water works and purification installations approximately five kilometers south southeast of Cernavoda.
21. Saligny Village and railroad station are located about five kilometers from the beginning of the Canal, and the present working site is about 500 meters further back. Work is particularly difficult at this point; extensive blasting and levelling operations have to be carried out under difficult soil conditions. The work accomplished at Saligny consists of the excavation of the foothills of the Brogdaprosti, the re-laying of the railroad tract, the building of entry and exit basins for the Canal lock, the lock itself, drainage canals, a pumping station, and a cement factory.
22. To a height of 30 meters the Brogdaprosti consists of granite rock covered with a layer of yellow loess. The loess was first removed with excavators and by hand, and the new bed for the Saligny-Cernavoda railroad track was blasted into the rock. The main line from Cernavoda to Constanta will also use this track, since the lock and lock basin will occupy the site of the present track. This work had been finished by the end of 1951.
23. Work on the Canal is done by two Skoda automatic, coal-burning excavators with a capacity of 1 cubic meter each. These are out of order at least half of the time. Three small Denmark excavators with a capacity of .5 cubic meters each, approximately 30 large Soviet 8-ton self-tipping trucks, and 10 Soviet caterpillar bulldozers with a capacity of 1.5 cubic meters each are also used. Compressed air for the drilling and blasting work is supplied by a compressor station with new British-made machinery.
24. Five or six large new pumps were brought from the USSR for the drainage canal. The motor casings bore the name Zis, but during the inauguration ceremony of the pumping station, these casings were raised and the name Hotchkiss could be clearly seen on the cylinder heads.
25. The cement factory supplies cement and finished concrete blocks for the building of the lock basins and the pumping installation for the drainage canal. More than 100,000 cubic meters of concrete have been used at this point.
26. Only political prisoners sentenced to more than five years were sent at first to work at Saligny. Later these prisoners were taken to Valea Neagra and Tasaul, and only persons under administrative detention remain at Saligny. The latter have not been sentenced, and it is said that they would have to serve two years; however, they are not released in most cases at the end of this period. There were 2,000 prisoners at Saligny in March 1951.
27. From Saligny to Poarta Alba, along the Carasului Valley, the ground is even, and excavation is done by hand.

SECRET/CONTROL - U.S. OFFICIALS ONLY

SECRET/CONTROL - U.S. OFFICIALS ONLY

- 4 -

28. No prisoners are employed between Saligny and Kilometer 31 on the Canal. Work on this section is done by peasants from the poor districts in the vicinity. They are paid piece rates, determined by the volume of soil which they have excavated and hauled. They usually bring their entire families to help remove soil, using farm carts, to points at which dams and embankments are to be built. The peasants are fairly well paid and work better than prisoners.
29. From Saligny to Madgidia the Canal runs through the marshy Caras Valley. Work on the Canal in this area had not begun in 1951, so as not to interfere with communications.
30. A large mechanical and automobile repair workshop has been built in this area and equipped with 170 new Soviet machines of modern types. These include precision lathes, shaping machines, and machinery for grinding pistons. There are also two garages similar to those at Cernavoda. A large cement factory which had been built on a hill east of the town was almost ready for operation by the end of 1951.
31. Buildings for the new town are being erected in the foothills.
32. The most notorious of all prison labor camps is at Kilometer 31, on the Canal, where approximately 2,000 prisoners are held. These prisoners have all been sentenced to terms of at least 10 to 15 years, and are completely isolated from all outside contacts. Their work consists solely of digging.
33. North of the railroad track the new station of Dorobantul has been built, and the new double track from Dorobantul to Capul Midia (Tasaul) has been laid.
34. Preliminary excavations on the Canal in this area are made in the form of terraces. The soil is removed by rail to Ovidiu, where it is used for leveling work. Forty to fifty 8-ton trucks are also used to transport soil as far as Kilometer 38. They are driven by prisoners.
35. A port area, approximately 600 x 150 meters, has been built on the Canal at Poarta Alba. A four-story administrative building with steps leading down to the water, is located in this area. This building is luxuriously equipped and has offices, conference rooms, and living accommodations.
36. An experimental section of the Canal for geological studies has been dug south of the highway, opposite the port, at the direction of a Soviet geologist. Although this section is only 8 meters deep, one of its sides is 20 meters high because of the high embankment of the highway. This work was done by punishment brigades 23 and 24 and was considered particularly arduous. Rock was reached in some parts of the section.
37. Very large quantities of materials are stored at the depot which formerly belonged to Derubau (Deutsche-Rumenische-Baugesellschaft), a branch of the Todt organization. Six or seven Czech electric conveyor excavators are used at this point. Six engines and 50 to 60 freight cars are used 24 hours per day to remove the soil excavated.
38. The repair workshops have equipment similar to that of the garages at Cernavoda. Power for the workshops and for lights in the port and village is supplied by a small power plant with a single diesel engine. In the autumn of 1950 the supply of power became insufficient, and current was brought overland from Ovidiu.
39. In 1951 Poarta Alba was the largest prison camp, with 6,000 prisoners. It serves also as a collection and transit camp where prisoners are examined and classified before being distributed to various places of work. The barracks lie close to the new highway and cover an area of about 10 hectares. The camp was originally south of the highway, but the prisoners were transferred to the other side when the police and Securitatea were placed in the original camp.

SECRET/CONTROL - U.S. OFFICIALS ONLY

25X1A

SECRET/CONTROL - U.S. OFFICIALS ONLY

- 5 -

40. The barracks were built by the prison labor department of the Ministry of the Interior. The first barracks were 25 meters long x 10 meters wide, but subsequent barracks are built in the form of an H, with accommodation for 50 to 60 men in each building..
41. On the peninsula the Canal runs through good soil, principally gardens owned by farmers. Excavation is done by peasants who remove the soil to the small bay with their farm carts.
42. At first work was done by hand: by peasants in the eastern part and by prisoners in the western part. A ditch, 1.5 meters wide with straight banks, was cut and a small gauge track was constructed at the bottom of the ditch to remove the earth. The banks of the ditch were then attached, and the cutting was gradually widened. The excavated soil is used to build a dam 200 meters long and 6 meters wide into the lake at the small bay. A pumping installation to the right of the dam supplies water for the hydraulic excavators, while the resulting mud is carried into the lake through a drainage ditch to the left of the dam.
43. Towards the center of the peninsula, which has an elevation of 15 meters, two large Soviet hydraulic excavators are used. The height in the middle of the peninsula was attached by the hydraulic excavators from both sides. The only engineer employed in this section was a certain Avram, who worked first as a prisoner and later as a paid employee.
44. Work on the peninsula was extremely difficult in the winter of 1949-1950; the weather was exceptionally cold, and the ground was frozen to a depth of two meters. The prisoners broke up the frozen ground with picks and were expected to handle fragments up to a cubic meter in size.
45. No prisoners were employed on the Canal between Poarta Alba and Valea Neagra before 1950. However, in 1951 prisoners from Poarta Alba were employed at Kilometer 38, and prisoners from the Peninsula camp were used between Kilometer 42 and 45.
46. The Peninsula camp is situated on the northern shore of Lake Siutghiol. The road to the camp passes south of the village of Valea Neagra. Prisoners at this camp were used to build the section of the Canal between Kilometer 44 and Mamaia. The section from Mamaia to Capul Midia was built by prisoners from Capul Midia.
47. The Peninsula camp, smaller than the one at Poarta Alba, has about 4,000 prisoners. The huts are built in the shape of an H and hold 50 to 60 men each.
48. In this section prisoners are employed at these places:
  - a. Excavation on the peninsula, southeast of the camp.
  - b. In the quarries at Ovidiu, where work is carried on day and night in three shifts. Huge blocks of stone are cut for Capul Midia port, stone and gravel are produced for filler for the dams, and supplies are stored until required by other sections of the Canal works.
  - c. The filling-in of the small bay and the reinforcing of the Canal banks at Ovidiu.
  - d. Excavation near Mamaia.
49. Two percent of all prisoners work in the technical and administrative offices. Engineers were employed at first as manual laborers, but in 1950 it was found more profitable for the Prisons Administration to employ them in their profession and obtain higher rates of pay for them.

SECRET/CONTROL - U.S. OFFICIALS ONLY

SECRET/CONTROL - U.S. OFFICIALS ONLY

- 6 -

50. The old quarry at Ovidiu was abandoned, and quarrying was begun on the other side of the hill, west of the Constanta-Tulcea highway. Large blocks are cut for the dams, the breakwater at Capul Midia, and the port at Cernavoda; smaller stones are used to fill in the small bay and crushed to provide gravel for concrete. The old quarry is used as a depot for machinery and materials received from the USSR, including cables, tractors, cranes, and dredgers.
51. The excavators are assembled on a special site. Two Soviet electric excavators and one Czech coal-burning, caterpillar excavator are used in the new quarry. The Soviet excavators have a lifting capacity of 2.5 cubic meters and can lift large boulders which have been loosened by blasting.
52. Approximately 60 Soviet, self-tipping freight cars, standard gauge, are used at the quarry. Each car holds up to 30 tons of stone. Two old American excavators had been used in the old quarry.
53. The Ovidiu II power station is planned to be the largest in all southeast Europe. It is often asked why a thermal station was being built instead of a hydroelectric station, for which the canal could have supplied power. The answer appears to be that the installations for the station had been dismantled by the Soviets, either in the USSR or in some place in the West, and that they wished to sell these to Rumania. The station would, at the same time, constitute an important consumer of Soviet soft coal, which can be shipped directly from Odessa to Ovidiu. Machinery for this power station was being installed in 1951.
54. The small power station, which was already in operation, was installed by Brown-Boveri in 1950.
55. Work is in process at two points near the village of Mamaia. A section of the Canal, approximately 1.5 kilometers long and near the end of the village, is being excavated by prisoners from Tasaul. Excavation is done by hand, and the soil is taken by truck to the seashore for building up the beach and low-lying areas.
56. The second site is near the southern point of Lake Tasaul, where three to four kilometers of the Canal are being built by paid workers and peasants. The workers are housed in open camps, consisting of several hundred small brick houses, and a number of barracks. The camp is close to the Canal lock near the seashore and adjacent to the railroad from Tasaul to Constanta. The most important point of this section is the lock cut into solid rock, approximately three kilometers from the village of Mamaia.
57. Just beyond the lock there is a large timber depot, northwest of the workers' camp. South of the depot, near the shore, there are three automobile repair workshops similar to those at Saligny and Cernavoda.
58. The railroad track along the shore, which passes between the camp and the timber depot, is also used as a siding for the Canal works. Two kilometers north of Mamaia a line branches off to the northwest, crosses the Mamaia-Capul Midia highway and a dirt road, and joins the new, double-track Dorobantul-Capul Midia line after 2.5 kilometers. South of this branch line and west of the dirt road there is a new brick yard, which was built in 1950-51 by prisoners from the Peninsula Camp.
59. North of this branch line is the airfield built in 1941. It is now under Soviet control and has two large double hangers, capable of holding 20 to 25 transport aircraft. There are three office buildings on the airfield, and the railroad siding, which runs between the airfield and the brick yard, is used by both. Fuel for aircraft and machinery and materials for the brick yard are brought in over this siding.
60. The village of Mamaia is built on low sand dunes near the beach, and bunkers have been built both within the village and in the dunes. While work on the bunkers was in progress, they were concealed by boarding which was not removed until the bunkers had been completed and camouflaged.

SECRET/CONTROL - U.S. OFFICIALS ONLY



SECRET/CONTROL - U.S. OFFICIALS ONLY

- 7 -

61. The large cement factory, where many prisoners are employed, is situated west of the prison camp in the curve of the highway which leads from Mamaia to Capul Midia. The factory has a special railroad station called Betonaj, which has one siding north of the factory to the camp and several sidings south and parallel to the main line.
62. The cement factory thus lies between two separate sets of railroad tracks, about 260 meters apart. To the right and left of the center of the factory, at right angles to the sidings, there are sets of 26 single rails each, placed on short ties at intervals of 3.5 meters. These rails are used by mobile cranes, which transfer large blocks of concrete to the railroad sidings for transport to the port and breakwaters.
63. A large concrete mixing machine is mounted on a six-meter scaffolding near the center of the factory area. The mixing container of this machine, originally holding 900 liters, was replaced by one holding 1800 liters. The mixing machine receives salt water from an adjacent tower.
64. The blocks are made in moulds, which are placed on a framework of boards filled in with sand and set in the spaces between the rails on which the cranes run. The liquid concrete is poured into the moulds, left to dry for a period of 5 to 6 weeks, lifted and carried by the cranes to the end of the single rails, and placed on railroad cars for transport to the breakwater and port. A total of 900 blocks, all of the small type, was made in the autumn of 1950.
65. Blocks are made in two sizes: approximately 1.9 x 1.9 x 2.2 meters, weighing 15 tons; and approximately 1.9 x 3.8 x 2.2 meters, weighing 30 tons. A 28 millimeter iron loop is fitted into the block before it sets to facilitate handling.
66. The concrete mixture consists of one part sand to two parts water and 400 kilograms of cement per cubic meter. Fifty percent of the cement used is hydraulic cement for use under water. Sand is brought from the Mclidova river and gravel from the Ovidiu quarry. The weight of the finished concrete is 1.6 to 1.7 tons per cubic meter.
67. Breaking stones excepted, pouring of concrete blocks is considered the hardest work by prisoners, who have to work out of doors for eight hours at a time. In the summer of 1949 the concrete mixer and water tower, though not in use, had already been built. As late as March 1951, both the mixing and bringing of water from the lake was being done manually by prisoners. In the autumn of 1951 a single water pipe was opened, but this line does not serve all the mixing points.
68. Concrete is mixed on platforms, measuring approximately 5 x 6 meters, which are set between the single rails used by the cranes. Sand and gravel is brought by rail and piled up by each platform. Old freight cars are placed between the platforms to serve as water reservoirs. Cement is brought from the depot on small carts. The concrete mixture is prepared, tipped in, and pressed down.
69. Each mixing platform has a crew of 27 to 31 men: 2 carry water; 2 carry cement; 2 to 3 carry sand; 4 to 5 carry gravel; 8 do the mixing; 6 to 8 carry the mixture to the mould; 2 press it down; and 1 pours water on the finished block. Each crew has to produce six blocks a day, or about 90 tons of concrete. Approximately 150 liters of water are required for each cubic meter of concrete. The 2 cement carriers bring about 24 tons of cement a day on small carts, and those carrying sand and gravel bring about 60 tons a day by wheelbarrow.
70. A few prisoners are employed in the carpentry section of the cement factory to make scaffolding and moulds for blocks. The equipment in this section consisted of 2 to 3 circular saws, 2 ribbon saws, and 2 mechanical planes, all of simple types.
71. Tasaul is the second largest prisoner camp and the one most feared by prisoners. More than 5,000 prisoners were held here in 1950 and 1951. A Securitatea camp is located immediately next to the prison camp, and the Graniceri barracks are situated next to the Securitatea Camp, in the direction of the port.

SECRET/CONTROL - U.S. OFFICIALS ONLY

SECRET/CONTROL - U.S. OFFICIALS ONLY

- 8 -

72. In 1949 only criminals and persons who had tried to cross the frontier illegally were sent to Tasaul. In 1950, 150 students were brought from either Pitesti or Aiud, but they were transferred two weeks later. At the end of 1950 criminal prisoners and persons caught on the border were transferred to Poarta Alba. Tasaul then became a punishment camp for political offenders serving five year sentences or more and for persons held under administrative orders only.
73. In 1949, when the Tasaul camp was first established, the prisoners were organized into brigades for work purposes. A working brigade normally consists of 50 men, all housed in a single room (each barrack holds 4 brigades). It is general practice to use an entire brigade on the same job.
- a. Six to nine brigades were used to build the camp and roads in the vicinity.
  - b. Two brigades are used in the construction of the moles and breakwaters at Capul Midia.
  - c. Six brigades were used to build the large cement factory; 8 crews of 28 men each are used to make concrete blocks; 30 additional men are used to make moulds; and 1 brigade is used to unload cement.
  - d. About 10 brigades are used to break stones brought from the Ovidiu quarry. These prisoners sit between the railroad sidings leading to Ovidiu where the stones were tipped. They have to produce a daily quota of broken stone for loading and transporting to the concrete mixer. A narrow gauge track for carts to remove gravel lies between the sidings.
  - e. Two brigades are used to lay and move railroad tracks, build embankments, and fasten ties.
  - f. Three to five brigades are permanently used to level the approach to the port and the marshy ground surrounding the two lakes.
  - g. Six to eight brigades were used on the Peninsula in 1950 to level the future camp site and to build the camp itself.
  - h. Two brigades are used in the automobile repair workshop at Navodari.
  - i. Two to three brigades are used to repair the Canal Works' rolling stock, which is kept in sheds adjacent to the Betonaj station.
74. South of Lake Tasaul two large Skoda excavators are used on a 500 meter section of the Canal. They are equipped with 12 scoops, which are operated by 60 centimeter rubber conveyor belts, 7 meters long and powered by a gasoline motor. Each scoop is attended by 8 prisoners, and work proceeds very rapidly.
75. Capul Midia port is protected by two breakwaters. The eastern mole, parallel to the shore, is to be 3.5 kilometers long and will have a railroad track running to the end of the mole. One thousand and twenty meters of the mole had been completed by March 1951. The southern mole is 500 meters long, and the opening between the two moles is 150 meters wide.
76. In constructing the moles, large boulders weighing from 8 to 10 tons each are brought from the Ovidiu quarry and lowered into the water. The spaces between them are filled with smaller boulders and stones, until a fairly smooth surface was obtained. Concrete blocks are then placed on this foundation, and the entire structure is given a concrete covering. The underwater work is accomplished with the aid of caissons.

SECRET/CONTROL - U.S. OFFICIALS ONLY



25X1A

SECRET/CONTROL - U.S. OFFICIALS ONLY

- 9 -

77. It is believed that the moles will reach a depth of 40 meters at the sea end. Building materials for the shorter southern mole are brought to the site by barges, which are unloaded on a temporary pontoon bridge. This bridge was constructed with the aid of two divers from Odessa, who worked at a depth of 9 meters.
78. Work on the breakwaters at Capul Midia is considered punishment duty. Approximately 500 tons of large boulders are delivered per day, have to be lowered into the water, the spaces filled with smaller stones, and the work completed within eight hours. The railroad track is built along with the breakwater; sections are added as the breakwater is completed to a certain point. The road consists of a double track with switches. Trains of ten cars, with the engine at the rear, are pushed to the end of the breakwater, unloaded by cranes, and shunted on the other line to be returned.
79. Work on the breakwater is often held up because the track is not open for the second train or because there is insufficient stone ready at the quarry.
80. One of the cranes on the breakwater is a 30 ton Denmark with a caterpillar tractor. The second is a special 45-ton crane which runs on rails.
81. The bottom of the Canal was fixed at 2.1 meters above sea level. Below this depth too much sea water and water from the marshes drain into the bed and make digging impossible. Work is difficult even at the fixed level.
82. A hill about 600 meters long, which had to be removed in sections, was one of the obstacles in the third section of the Canal. The first terrace was cut from the planned level of the Canal bed to a point vertically below that at which the hill was 4 meters above sea level; the second terrace was cut at this point as far as an elevation of 6 meters; and the series of terraces was continued until the hill had been removed. Rails were laid on each terrace, and the soil was transported and dumped at the northeastern point of Lake Siutghiol.
83. It was very difficult to lay rails at the lowest level because of the mud. At first the carts were pushed by hand to Lake Siutghiol, but later a small Ganz diesel engine was used to draw 10 carts at a time. The tracks tended to sink because of the mud, and the engine was derailed so often that two large tractors with rubber tires, two meters in diameter, were substituted.
84. The prescribed daily work norm for prisoners on the Canal between Mamaia and the last lock is the excavation of 6 cubic meters of soil, which then have to be loaded on wheelbarrows and taken a distance of 100 to 150 meters. Prisoners are encouraged to exceed their norm by offers of bonuses and other advantages, including the promotion to "brigadier" (block warden). When a prisoner becomes a "brigadier", he is relieved of all manual labor and acts as a foreman. Some prisoners were able to increase their daily quota to as much as 12 cubic meters; as a result the norm was gradually raised to 7 or more cubic meters.
85. Lower norms were set for work done at the bottom of the Canal. Each meter that excavated soil had to be raised was considered the equivalent of moving 20 meters on the level; consequently, the norm was reduced to 3 to 5 meters per day.
86. The nominal working time for prisoners is 8 hours per day, but rarely does anyone complete his norm in less than 10 hours. The working day, which includes care of the tools and walking to and from work, is generally 12 hours.
87. The soil at the Navodari lock is light sand, and it is used to build railroad embankments and to fill in marshy sections. Norms are as high as 40 cubic meters per day in this area.
88. Norms in the third section of the Canal, where the 600-meter-long hill was being removed, ranged from 2 cubic meters up per day.

SECRET/CONTROL - U.S. OFFICIALS ONLY

SECRET/CONTROL - U.S. OFFICIALS ONLY

- 10 -

89. Breaking stones is done principally in winter, when other work is made impossible by rain or frost. This work is considered dangerous, because the prisoners are not supplied with eye shields; many of them suffer injuries from flying splinters. The norm was first set at 2 cubic meters per day, but this was found to be too much, and a final figure of .5 cubic meters per day was accepted. Prisoners who produce less than this norm have their bread ration withdrawn and given to workers who exceed the norm.
90. The Canal Works Administration paid fairly high wages to the Prisons' Administration for all prisoners. It is estimated that the Outside Labor Department of the Prisons' Administration made a profit of approximately 40,000,000 lei on prisoners employed in making concrete blocks during the four summer months of 1949.
91. Labor in the two punishment camps at Poarta Alba and Tasaul, which were opened in May 1949, brought a profit of 70 to 80 million lei to the Outside Labor Department by the end of 1949.
92. Prisoners were also employed in the drawing offices of the Ministry of the Interior. High wages were paid for their services by the Canal Works Administration, with the Ministry benefiting from the arrangement.

SECRET/CONTROL - U.S. OFFICIALS ONLY